

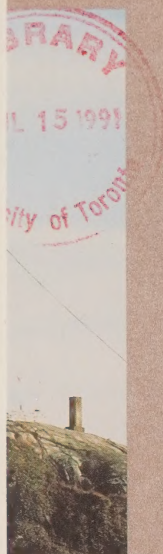


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Government
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Publications



A

**guide to
Canadian
Hydrographic
Service
Charts and
Publications**

Pêches
et Océans

Canada

CAI
FS 200
-2019 (5)



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-2019



Fisheries
and Oceans

Pêches
et Océans

Canada

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CHS Mandate



Hydrography is the practice of surveying and charting waters for navigation. Programs of the Canadian Hydrographic Service include bathymetric and tide current surveys and the preparation and distribution of navigational charts, tide and current tables, sailing directions and related publications. These activities are designed to meet the needs of the marine community and to promote safe and efficient marine transportation in Canadian and adjacent waters.

Introducing the Canadian Hydrographic Service

This Guide will tell you what you should know about nautical charts and publications for safer boating. It's just part of the function of the Canadian Hydrographic Service (CHS), an organization devoted to marine safety since 1883.

CHS has a world-wide reputation for the excellence of its products and services gained, in part, by constantly striving to be customer orientated, and to serve both the small craft and commercial ships that use our navigable waters.

Many of its efforts are to improve safety on Canadian waters. To help in this task, CHS has established a network of authorized dealers through whom its products can be obtained.

Telephone numbers for all CHS Services available by phone can be found on the back cover.

Check the yellow pages for an authorized dealer displaying this sign:



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Catalogues

CHS publishes catalogues, numbered one to five. Numbers one to four list and illustrate chart coverage for Atlantic, Pacific, Great Lakes and Arctic Regions. Each of these four catalogues is a mandatory publication that must be carried by vessels* to meet the *Charts and Publications Regulations of the Canada Shipping Act*. The catalogues also list related publications and CHS Dealers in Canada and foreign countries.

The fifth catalogue lists geoscientific publications and illustrates the map coverage available. The maps show the nature of the seafloor and the material beneath.

* includes every description of vessel used in navigation and not propelled by oars. Ref.: *Canada Shipping Act Charts and Publications Regulation* P.C. 1973-3554 6 November 1973



Nautical Charts

The different types

There are about 1,000 Canadian nautical charts covering Canadian waters. Chart 1 — Symbols and Abbreviations explains the symbols used to describe features on all charts. It is a vital reference for understanding charts.

Standard Charts

Standard nautical charts cover waters used primarily by commercial navigation. These charts are hand amended up to the date of distribution by CHS to the dealers or directly to mariners. The charts must continue to be corrected by the mariner for changes advertised after this date. All changes to charts are advertised in the Canadian weekly publication *Notices to Mariners*.

Nautical charts show hazards, aids to navigation, features along the shoreline and the seafloor, as well as man-made and natural features of the area.

Chart scales

“Natural Scale” means the relationship between the size of the chart and the earth. For example, 1:15 000 means that one unit on the chart equals 15,000 units on the earth. The different types and scales of charts and their uses are:

HARBOUR CHARTS are large scale, 1:5 000 — 1:15 000 and are used for navigation in harbours or intricate, hazardous, shoal-infested waters.

APPROACH CHARTS, 1:15 000 — 1:50 000, are used for approaching coasts where a lot of detail is required.

COASTAL CHARTS, 1:50 000 — 1:150 000, are used to show continuous extensive coverage with sufficient inshore detail to make landfall sightings easy. Fisheries charts use these scales.

GENERAL CHARTS, 1:150 000 — 1:500 000, give extensive offshore coverage with sufficient inshore detail to make landfall sightings easy. Fisheries charts use these scales.

SAILING CHARTS, 1:500 000 and smaller, are used for offshore navigation beyond sight of land.

SMALL CRAFT CHARTS. Small craft charts of some waters are specially designed for recreational boaters and are available mainly in strip (accordion-folded) with one in an atlas format. The small craft charts are not hand amended. See post-printing amendments paragraph of this brochure for instructions on amending small craft charts.

FISHERIES CHARTS. These are charts covering vast areas of the Atlantic off the East Coast of Canada. They are specially designed for the fishing industry.

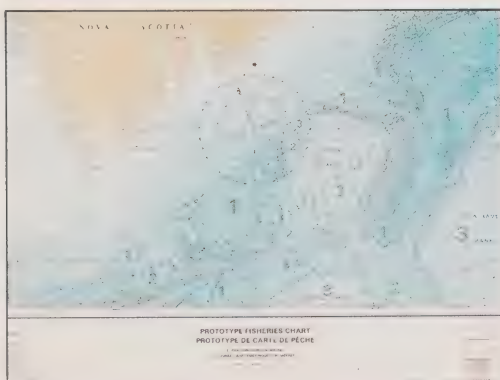


Chart Corrections

Notices to Mariners

Notices to Mariners describe amendments to charts and publications required because of changed conditions.

Copies of *Notices to Mariners* are available free of charge by writing directly to:

Director General
Aids and Waterways
Canadian Coast Guard
Transport Canada
Ottawa, Ontario, Canada K1A 0N7

Chart Edition Categories

Being able to recognize the 'chart edition category' is important to users in updating their chart folios. The categories are defined as follows:

NEW CHART is the first publication of the chart, embracing an area not previously charted at the scale shown, or embracing an area different from any existing Canadian chart.

NEW EDITION is a new issue of an existing chart containing amendments essential to navigation in addition to those in *Notices to Mariners*. It renders all preceding editions of the same chart obsolete.

REPRINT is a new printing of an existing chart incorporating no amendments of navigational significance other than those previously promulgated in *Notices to Mariners*. Previous printings of the chart remain in force.

MAKE SURE YOU BUY THE LATEST EDITION

Your CHS Dealer has a list of all the Canadian nautical charts with their latest edition and reprint dates (if applicable), which is published quarterly in the *Notices to Mariners*. Ask to see this list when purchasing charts to make sure you are buying the latest edition available. This is important because changes can affect your safety. If any weeks have passed since the quarterly listing, Section I of the weekly Notice to Mariners should be reviewed for later advertisements.

Post-printing Amendments

Most Canadian charts are hand amended after printing, up to the date of issue from CHS distribution offices.

Charts not hand amended will carry the following note in red:

“The information contained on this chart has been corrected from Notices to Mariners to the date of publication only. For subsequent corrections consult the Notices to Mariners, or write to:

Nautical Information

Canadian Hydrographic Service

Department of Fisheries and Oceans

Ottawa, Ontario, K1A 0E6

Please state the latest edition date.”

If a chart is hand amended, a green stamp or label will tell the user up to what edition of *Notices to Mariners* amendments have been made.

Sailing Directions

Sailing Directions are the indispensable companions to charts. There are twelve volumes of *Sailing Directions* in English (ten in French). Each volume contains a wealth of information on the areas they cover; general navigation information, general geographic information, descriptions of port facilities and detailed descriptions, with photographs, of sailing conditions between specific points.

These volumes are:

- Labrador and Hudson Bay
- Newfoundland
- Gulf and River St. Lawrence
- Nova Scotia (Atlantic Coast) and Bay of Fundy
- Great Lakes Volumes I & II
- British Columbia Coast (South) Volume I (English only)
- British Columbia Coast (North) Volume II (English only)
- Arctic Canada Volumes I, II & III
- Great Slave Lake and Mackenzie River



Small Craft Guides

These guides are similar to *Sailing Directions* but are specifically designed for use by the recreational boater. They cover a broad range of important subjects and should be used whenever a recreational boater enters unfamiliar waters.

There are eight volumes of *Small Craft Guide* in English (six in French) covering:

- Saint John River
- Rideau Waterway and Ottawa River
- Lake Ontario
- Trent-Severn Waterway
- Georgian Bay
- Lake Nipissing
- British Columbia Volumes I & II (English only)



Tides, Currents and Water Level Information

CANADIAN TIDE AND CURRENT TABLES. The Tide Tables provide predicted times and heights of the high and low waters associated with the vertical movement of the tide. The Current Tables provide predicted times for slack water and the times and velocities of maximum current, all of which are associated with the horizontal movement of the tide.

The Canadian Tide and Current Tables are published in six volumes.

Volume 1 — Atlantic Coast and Bay of Fundy

Volume 2 — Gulf of St. Lawrence

Volume 3 — St. Lawrence and Saguenay Rivers

Volume 4 — Arctic and Hudson Bay

Volume 5 — Juan de Fuca Strait and Strait of Georgia

Volume 6 — Barkley Sound and Discovery Passage to Dixon Entrance

Composite volumes 1-4 and 5-6 are also available.



TIDES IN CANADIAN WATERS.

This informative booklet contains an outline of the theory of tides along with descriptions and maps of the types which are found in Canadian waters.

CANADIAN TIDAL MANUAL.

This authoritative reference deals with the theory and procedures involved with the gathering and application of tide, current and water level information during hydrographic surveys and other related activities.

MONTHLY AND YEARLY MEAN WATER LEVELS. This booklet is issued every five years and contains tabulated monthly and yearly mean water levels, for the entire period of operation, for each station within the Canadian Hydrographic Service's permanent water level gauge network.

TIDAL CURRENT ATLASES.

These atlases present a comprehensive view of the hourly rate and direction of major tidal currents within specific coastal regions of Canada.

Available Tidal Atlases:

- Atlas of Tidal Current Charts, Vancouver, B.C.
- Atlas of Tidal Current Charts, Yuculta Rapids, Cordero Channel, B.C.
- Current Atlas, Juan de Fuca Strait to Strait of Georgia

- Atlas of Tidal Current Charts,
Bay of Fundy and Gulf of Maine
- Tidal Current Charts,
St. Lawrence Estuary

HYDROGRAPHS. Hydrographs 207 and 220 give the monthly and yearly mean elevation for Lakes Superior, Huron, Erie, Ontario, St. Francis and Lac St. Louis from 1916 to date.

Hydrograph 230 gives the monthly and yearly tide levels for Halifax, N.S., Churchill, Manitoba and Victoria, B.C. from 1916 to date.

WATER LEVEL INFORMATION SERVICE. Up-to-date information on water levels in the Great Lakes System at the gauges referred to in the Monthly Water Level Bulletin, may be obtained during office hours by telephoning the Water Level Information Line at Central and Arctic Region, Burlington.

TIDEAPHONE is a public telephone service operated from Halifax, Saint John and Quebec City, which gives the predicted times of high and low tide for up to a week. **TIDEAPHONE** is user friendly. By dialing appropriate digits, callers with a touch tone phone can select a tidal message for an area of their interest in either English or French.

Halifax, N.S.	(902) 426-5494
Saint John, N.B.	(506) 636-4429
Quebec, P.Q.	(418) 648-7293

TIDAL ACQUISITION AND TELEMETRY SYSTEM (TATS).

The gauges of the CHS TATS network are interrogated automatically by a Marine Environmental Data Service computer using an automatic dialer. The data are stored in a special data base where they are corrected and made available on-line to outside users. User manuals are available from Marine Environmental Data Service of DFO.

TELEANNOUNCERS. The Canadian Hydrographic Service operates a network of voice announcing gauges in the St. Lawrence, Great Lakes and Pacific areas. Information from these gauges can be obtained by telephone and include:

Central and Arctic

Thunder Bay	(807) 344-3141
Sault Ste. Marie	
(above the lock)	(705) 949-2066
Sault Ste. Marie	
(below the lock)	(705) 254-7989
Goderich	(519) 524-8058
Belle River	(519) 728-2882
Kingsville	(519) 733-4417
Port Colborne	(416) 835-2501
Port Weller	(416) 688-3818
Iroquois Lock (above the	
lock)	(613) 652-4426
Morrisburg	(613) 543-3361
Summerstown	(613) 931-2089

Pacific

Steveston	(604) 272-4284
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Special Charts

THE GENERAL BATHYMETRIC CHARTS OF THE OCEANS (GEBCO). A series of 19 charts of the world's oceans that "butt join" to give a wall mural portrayal (approx. size $2\frac{1}{4} \times 5\frac{1}{2}$ metres) including the two polar areas.

In addition, CHS provides special charts. They are:

- Plotting Charts
- Mercatorial Plotting Charts
- Territorial Sea and Fishing Zone Charts
- Magnetic Declination Chart (MCR701)

and Geoscientific Maps that include:

- Natural Resource Maps
- National Earth Science Series
- Regional Bathymetry Maps

Other Publications

Additional mandatory publications under the *Charts and Publications Regulations* are:

- Radio Aids to Marine Navigation (2 volumes)
- List of Lights, Buoys and Fog Signals (4 volumes)
- Ice Navigation in Canadian Waters
- Charts and Publications Regulations
- Notices to Mariners Annual Edition
- Code of Nautical Procedures and Practices

Other publications relevant to navigation, and useful to the mariner are:

- Collision Regulations
- Small Vessel Regulations
- Heritage Canals Regulations
- The Canadian Aids to Navigation System
- The St. Lawrence Seaway Pleasure Craft Guide
- A Guide for the Radio-Telephone Operator (Restricted Certificate Maritime Voluntary)
- Safe Boating Guide
- An Important Message for All Boaters

Relevant general interest publications include:

- Charting the Future
- DesBarres Hydrographer, Cartographer, Founder
- Sport Fishing Guide, B.C. Tidal Waters
- Guide to Federal Small Craft Harbours



For some boats and ships, carrying the appropriate charts is mandatory. For all who enter unfamiliar waters it is a matter of safety; their own, their passengers and their fellow boaters.

You can purchase charts from the CHS warehouses in person, by mail or by phone, Visa and Mastercard accepted. The warehouse locations are:

Hydrographic Chart Distribution
Office

Department of Fisheries and
Oceans

1675 Russell Road, P.O. Box 8080

Ottawa, Ontario

Canada K1G 3H6

Telephone (613) 998-4931, 32, 33

Canadian Hydrographic Service

Department of Fisheries and
Oceans

Institute of Ocean Sciences

Patricia Bay

9860 West Saanich Road

P.O. Box 6000

Sidney, British Columbia

Canada V8L 4B2

Telephone (604) 656-8358

All products and services are available where you see the CHS crest. Look in the yellow pages under charts or maps for dealers in your area. For more information:

WATER LEVEL INFORMATION LINES

Atlantic (Dartmouth)	(902) 426-5194 DR (902) 426-3846
Quebec (Mont-Joli)	(418) 773-8600
Central & Arctic (Burlington)	(416) 336-1841
Pacific (Sidney)	(604) 363-6371
Headquarters (Ottawa)	(613) 995-1493
Marine Environmental Data System (MEDS)	(613) 990-0243 DR (613) 990-0204

